

# BELMONT HIGH SCHOOL

## PROGRAM OF STUDIES

### 2017 - 2018

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*"The mission of Belmont High School is to prepare students for their futures by promoting and supporting a safe, diverse, respectful community that fosters individual responsibility and produces engaged members of society through rigorous academic environment."*

#### BELMONT HIGH SCHOOL

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#### NON-DISCRIMINATION POLICY

**The Shaker Regional School District does not discriminate in the administration of our educational programs, activities, or employment practices on the basis of race, color, national/ethnic origin, age, gender, religion, disability, sexual orientation, or marital status, or pregnancy. This statement is a reflection of the mission of the Shaker Regional School District and refers to, but is not limited to, the provisions of the following laws:**

Title VI and VII of the Civil Rights Act of 1964  
The Age Discrimination Act of 1967  
Title IX of the Education Amendment of 1972  
Section 504 of the Rehabilitation Act of 1973  
The Americans with Disabilities Act of 1975  
NH Law Against Discrimination (RSA 354-A)  
State Rule: Ed. 303.01 (i), (j), (k)

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## BELMONT HIGH SCHOOL - Core Values, Beliefs, and Learning Experiences

Belmont High School prepares students for their futures by promoting and supporting a safe, diverse, and respectful community that fosters individual responsibility and produces engaged members of society within a rigorous academic environment.

### We Value

- Academic challenge and rigor
- Inquiry and curiosity
- Purpose and determination
- Individuality
- Participation in community and society
- Personal responsibility and integrity

### We Believe

- Every student will be held to high standards of academic performance and personal accountability.
- Every student will be best prepared as individuals for their next stage in life through participation in a wide field of content and experience.
- Every student is part of a local and global community and needs to act and interact accordingly.

### 21st Century Learning Expectations

<b>Academic Expectations</b>	<b>Civic and Social Expectations</b>
<ul style="list-style-type: none"><li>• Successful students will effectively:<ul style="list-style-type: none"><li>○ Collaborate</li><li>○ Create and Perform</li><li>○ Critically Think &amp; Problem Solve</li><li>○ Present and Respond</li><li>○ Read</li><li>○ Use and Apply Technology</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Successful students will demonstrate:<ul style="list-style-type: none"><li>○ Civic and Social Responsibility</li><li>○ Global and Cultural Awareness</li></ul></li></ul>

## Introductions to Course Description Guide

The BHS Program of Studies is provided to help you develop a high school academic plan based on your interests, abilities, and goals. Brief course descriptions will acquaint you with both the required courses and the elective courses for the current school year.

As you study this booklet and talk with your parents, teachers, and school counselors about your course choices for next year, keep the following points in mind:

- Review graduation requirements for the different diploma options (pages 10-12)
- **All students are required to have at least 3 blocks of classes each semester. All students are encouraged to choose a full load of 4 blocks of classes each semester.**
- Most colleges or other post-secondary programs have required courses for admission. It is important to be aware of these as you make your course selections (page 4). Use the “4 Year Planner” on page 9 to assist with your overall high school planning.
- If you are undecided about your career future, please remember you are surrounded each and every day by competent, well-educated teachers, counselors, and staff who are valuable resources in answering questions about educational requirements and careers in their particular fields of study. Spend some of your time with these talented people! Our most important goal is to help each of you learn as much in high school as possible to prepare you for your personal and professional future!

## BHS Course Selection Process

Students are encouraged to pursue the most rigorous course work that they can successfully complete. To that end, the following course selection process is employed.

1. In mid February 2017, teachers will have access to the Web2School (W2S) course request portal to make 2017-18 student course recommendations.
2. Students will have access to course requests through the online W2S parent portal once the next year’s classes have been determined. (This will be mid-February)

2017) We ask students and parents to take great care and time with this process, considering the recommendations of their teachers. All recommended courses will be honored in the scheduling process, unless a change is dictated by teacher-parent-student discussion. All course selections are binding. Any changes needed would require exception.

3. Students conference with their current or most recent teachers in each subject area as well as with their parents and school counselors to determine the most appropriate courses for the next year.
4. Parents play an important role in the course selection process as ultimately the course requests are submitted through the online parent portal. Parents are urged to contact the school counselors with questions or concerns.
5. Once the master scheduling process is complete, typically mid-spring, preliminary schedules are distributed to students for the following year. There will be no changes to a course schedule unless a course is missing or being added.

### **Course Leveling**

Not all courses are appropriate for all students. It is important to select courses in which you can be successful yet that are challenging for you. Your parents, teachers, and school counselors will assist you in selecting the level of course that are most appropriate for you.

### **College/Career Ready**

Each course offered at BHS is designed to help all students attain further knowledge and insight to help them progress appropriately in that subject area of study. Successful completion of College/Career Ready courses will meet the admissions requirements for many colleges and universities as well as technical and professional schools.

### **Honors**

Honors level classes are designed for students who have a strong command of basic skills in that subject area and will move at a quicker pace and there will be more independent, higher order of thinking and out of class work assigned as part of the course. These classes are designed for students who are passionate about the area of study and desire a deeper and most rigorous preparation in a subject area.

**Advanced Placement (AP)** courses provide high school students access to rigorous college-level courses and the opportunity to potentially earn college credit through successful completion of the AP exams given each spring. There is a fee for the AP exam of \$93 (2017), payment due before the exam can be taken.

**Project Running Start** - Running Start courses are denoted by the **RS** icon in this publication.

The New Hampshire Running Start Program is a unique higher education initiative for high school students. Students are given the opportunity to enroll in selected high school courses which offer college credit through the New Hampshire Community Technical College system at a significant reduction in tuition, \$150.00 per course. Students who successfully complete a **RS** course receive three (3) college credits at the LRCC system and appropriate high school credit.

Current Running Start **RS** courses include:

- English 12 Honors - Intro. to Literature
- Web Design/Multi-media
- Computer Graphics - Design Software
- Essential Computer Graphics - Digital
- Photography
- Statistics
- T.A.C. Math
- World History
- French III, IV, and V
- Spanish III, IV, and V

TAC Math, Statistics, and Intro. to Literature students are required to take and earn an established score on the Accuplacer Exam at BHS in order to be considered for the **RS** course credit. The cost of this exam is \$20.00.

<http://www.ccsnh.edu/academics/running-start>

## New Hampshire Scholar Program

The New Hampshire Scholar Program is part of the State Scholars Initiative, a national program that uses business leaders to motivate students to complete a rigorous course of study in high school. There are three pathways students may follow to fulfill the NH Scholars Program. Below is the link to the NH Scholars website which outlines the details. Please see your school counselor for more information.

<http://www.nhscholars.org/course-of-study/>

Each course that is part of the New Hampshire Scholars Program is designated as such in the Program of Studies. New Hampshire Scholars receive recognition at graduation, designation on their high school transcript, additional scholarship opportunities, and increased college and career access.

## Additional Educational Opportunities

### **School-to-Career**

Through career exploration, job shadows, and internships, our School-to-Career Coordinator offers programs that provide students with opportunities to acquire occupational skills and academic competencies in real-world settings. Students will connect and apply what they've learned in school to their work experiences in the community, making learning more relevant and enabling a smoother transition into the workforce and/or education beyond high school. Students can earn credit toward graduation depending on competencies met, time invested, and project completion.

### **Alternative Credit at Belmont High School**

We, the Belmont High School, hold the belief that all students have the ability to be successful learners. We also recognize that each student will reach their destination in several different ways. While we maintain a challenging and diverse learning environment, there are instances when students will seek credits independently of the traditional high school setting.

An 'alternative credit' is defined as a high school appropriate course or course of learning that is not offered in the regular curriculum and course offerings at Belmont High School. Some examples include courses as Laconia or Franklin Night School, VLACS, or a college course. At Belmont HS, students may earn up to a maximum of five (5) credits outside of Belmont HS toward their Belmont High School diploma. Specifically, students may earn five (5) credits in a BHS career, two (2) in a school year. All alternative courses will be above and beyond the full course load at BHS and not counted in a student's GPA. All alternative credits will be transcribed on the BHS transcript. No course currently offered at BHS will be allowed to be taken through VLACS. Please see your School Counselor for information on exceptions to this practice.

Students must make a formal request (forms available in the School Counseling Office) before they begin their alternative credit study. This form must be signed by the student, parent (if student is under 18), and approved by the school counselor or administrator. The approval form insures that the student, parent, and school officials have agreed which course will be taken and which BHS graduation requirement it will fulfill

### **Class Rank and Grade Point Average**

A student's grade point average (GPA) and class rank are computed on the basis of weighted grades assigned to a given course. A student's GPA is calculated at the end of each semester.

**College/Career Ready** courses receive a multiplication factor of 1.0

**Honors or AP and Running Start** courses receive a multiplication factor of 1.05

### **Grading System**

The school year is divided into four 9-week marking terms. Grades reports are issued soon after each quarter closes. Progress reports are issued in the middle of each quarter. Beginning in 2017-18, we will no longer be issuing interim progress reports as grades are available 24/7 on the Web-to-School (W2S) parent and student portal.

### **Preparing for College**

Admission to college is generally competitive and that a maximum rather than a minimum course of study is recommended. The single most important factor in admissions decisions is your academic record. The overall rigor of your course selection, types of course you select, as well as the number of years you study a subject and the grades you earn, are the primary importance. Additional consideration will be given to the student's class rank, GPA, co-curricular involvement, SAT and/or ACT scores. It is further recommended that students work closely with their school counselor in making plans for the future. This will help to insure that course selections are appropriate for your goals. The following chart generalizes recommended admissions requirements for various post-secondary options.

Academic Area	Highly Selective College/Univ	4 Year College/Univ	2 Year College/Univ	Technical Program	Military
English	4+	4	4	4	4
Math	4+	4	4	4	4
Science	4+	3-4	3	3	3
Social Studies	4	3	3	3	3
Foreign Language	4+	2-4	0	0	0

# Belmont HS 4-year Academic Plan Worksheet

	Minimum requirements for a BHS diploma	Grade 9	Grade 10	Grade 11	Grade 12
<b>English</b>	<b>4 credits req</b>	Foundations of Lit	English 10 English 10 H	English 11 English 11H	English 12 English 12H(RS)
<b>Math</b>	4 credits required (including Alg I, Geometry)	Algebra I Geometry Algebra II	Algebra I Geometry Algebra II	Algebra I Geometry Algebra II Advanced MathH Pre-Calc H StatisticsH	Algebra I Geometry Algebra II Advanced MathH Pre-Calc H StatisticsH(RS) Calculus H AP Calculus Senior Math TAC Math(RS)
<b>Social Studies</b>	3 credits req (Including Global Cit/Civics and one elective, World	Global Citizenship(beg. with Class of 2019) Civics Geography	World History World HistoryH AP World History	US History US History H APUS History	Social Studies electives
<b>Science</b>	3 credits req. including Phys Science and Biology	Physical Science Physical Science H Earth Science Other_____	Biology Biology H Chemistry Chemistry H Earth Science Other_____	Chemistry Chemistry H Physics Physics H Anatomy and Physiology Other	Chemistry Chemistry H Physics Physics H Anatomy and Physiology Other_____
<b>Economics</b>	.5 credits - can be fulfilled with either Economics .5 cr or Intro to		Intro to Business	Intro to Business or Economics	Intro to Business or Economics
<b>Health</b>	<b>.5 credit req.</b>	Health (1 credit)	Health (1 credit)		
<b>Computer</b>	<b>1 credit req.</b>	ICT (transferred from BMS) .5			
<b>Art</b>	1 credit req. (art, music, computer graphics)				
<b>Physical Ed</b>	<b>1 credit req</b>	PE	PE	PE or Per. Fitness	PE or Per. Fitness
<b>Other important and awesome courses I have</b>	These courses are ones you need to add to your 26 credit graduation requirement and/or you need them for college and career plans				

BELMONT HIGH SCHOOL      DIPLOMA OPTIONS

BHS Diploma - 25 (26 credits beginning with class 2018)

Required Subjects	Credits
English	4 Credits
Math	3 Credits - including Alg.1 (class of 2017) 4 Credits - including Alg. 1 and Geometry (Beginning with class of 2018)
Physical Science	1 Credit
Biology	1 Credit
Science Elective	1 Credit
Civics (Global Citizenship starting with class of 2019)	½ Credit (1 credit for Global Citizenship)
World History	1 Credit
US History	1 Credit
Social Studies Elective	½ Credit (not required if Global Citizenship is completed)
Health Education	½ Credit
Economics	½ Credit
Art Education	1 Credit
ICT	½ Credit
Technology Elective	½ Credit
Physical Education	1 Credit
Open Electives	8 Credits
<b>Total</b>	<b>25 Credits (class of 2017)</b> <b>26 Credits (beginning with class of 2018)</b>

## BHS Diploma of Distinction - 32 Credits

Required Subjects	Credits
English	4 Credits
Math	4 Credits - including Alg. 1, Geometry and Algebra II
Physical Science	1 Credit
Biology	1 Credit
Chemistry	1 Credit
Physics	1 Credit
Civics	½ Credit (or Global Citizenship 1 credit)
World History	1 Credit
US History	1 Credit
Social Studies Elective	½ Credit (not needed if Global Citizenship completed)
Foreign Language	2 Credits
Health Education	½ Credit
Economics	½ Credit
Art Education	1 Credit
ICT	½ Credit
Technology Elective	½ Credit
Physical Education	1 Credit
Open Electives	11 Credits
<b>Total</b>	<b>32 Credits</b>

In addition, students must:

- Submit a plan and receive approval for a community service project (see attached)
- Earn 14 of the required 32 credits as Honors, AP, and/or **RS** level courses
- Have a cumulative B+ average

### Minimum Standards Diploma - 20 Credits

(Application available in the School Counseling Office. Students must apply for this diploma option by 10/1 of their senior year and it must be approved by student, parent, school counselor, principal, and superintendent).

<b>Required Subjects</b>	<b>Credits</b>
English	4 Credits
Math	3 Credits - including Algebra 1
Physical Science	1 Credit
Biology	1 Credit
US History	1 Credit
World History or Geography (or Global Citizenship)	½ Credit
Civics (or Global Citizenship)	½ Credit
Health Education	½ Credit
Economics	½ Credit
Art Education	½ Credit
ICT	½ Credit
Physical Education	1 Credit
Open Electives	6 Credits
<b>Total</b>	<b>20 Credits</b>

## ENGLISH COURSE DESCRIPTIONS

### Required English Course Selections

#### **FOUNDATIONS OF LITERACY, Grade 9 (Honors option available) 1 CREDIT**

Foundations of Literacy is a one-credit course designed to prepare ninth grade students for the academic rigors that they will face in future English courses at both the high school and college levels. This course has a strong emphasis on literature and informational text comprehension and analysis along with writing, speaking, and listening skills.

#### **ENGLISH 10 1**

**CREDIT** *Prerequisite: Foundation of Literacy*

English 10 is a one-credit course designed to meet the needs of students who are planning academic and non-academic choices beyond high school. The course will focus on developing effective reading, writing, listening, speaking, viewing, and research skills and building on the skills established in the previous English course, Foundations of Literacy. Students are expected to develop critical thinking skills and use literacy strategies to comprehend and analyze various works of literature, media, and informational texts. There will be opportunities for students to fine tune writing skills by practicing informational, argumentative, and creative writing. Students will also develop public speaking and discussion techniques throughout the course.

#### **ENGLISH 10, Honors 1**

**CREDIT** *Prerequisite: Foundation of Literacy. Recommendation of current teacher / Evaluation of previous work by receiving teacher*

Honors English 10 is a one-credit course designed to prepare students who are planning to advance their education or career beyond high school. The course will focus on developing deeply analytical and effective reading, writing, listening, speaking, viewing and research skills and building on the skills established in the previous English course, Foundations of Literacy. Students are expected to apply critical thinking skills and use advanced literacy strategies to thoughtfully and deeply analyze various works of literature, media, and informational texts. There will be opportunities for students to

enhance writing skills by practicing informational, argumentative, and creative writing. Students will also develop public speaking and discussion techniques throughout the course.

## **ENGLISH 11**

**1**

**CREDIT** *Prerequisite: Foundation of Literacy, English 10*

English 11 is a one-credit course designed to meet the needs of students who are planning academic and non-academic choices beyond high school. The course will focus on developing effective reading, writing, listening, speaking, viewing, and research skills and building on the skills established in the previous English course. Students are expected to develop critical thinking skills and use literacy strategies to comprehend and analyze various works of literature, media, and informational texts by American writers. There will be opportunities for students to fine tune writing skills by practicing informational, argumentative, and creative writing. Students will also develop public speaking and discussion techniques throughout the course. The culminating project is a Junior Project - which focuses on career exploration and research.

## **ENGLISH 11, Honors**

**1 CREDIT**

*Prerequisite: Foundation of Literacy, English 10, Recommendation of current teacher / Evaluation of previous work by receiving teacher*

English 11 Honors is a one-credit course designed to prepare students who are planning advance their education or career beyond high school. The course will focus on developing deeply analytical and effective reading, writing, listening, speaking, viewing, and research skills and building on the skills established in the previous English course. Students are expected to apply critical thinking skills and use advanced literacy strategies to thoughtfully and deeply analyze various works of literature, media, and informational texts by American writers. There will be opportunities for students to enhance writing skills by practicing informational, argumentative, and creative writing. Students will also develop public speaking and discussion techniques throughout the course. The culminating project is a Junior Project - which focuses on career exploration and research.

## **ENGLISH 12**

**1**

**CREDIT** *Prerequisite: Foundation of Literacy, English 10, English 11*

This course is designed to meet the needs of the diverse learner. English 12 students may be headed for colleges, technical schools, the military, and/or workplaces. This course recognizes students' varying abilities and goals. The focus is on developing effective reading, listening, speaking, viewing, research, and writing skills. Students are exposed to various genres of literature and taught the skills required to comprehend them. Student will write in a variety of forms for various purposes. Public speaking and presentations will be emphasized. There is a Senior Project component to this course as well.

## **RS ENGLISH 12, Honors**

**1**

**CREDIT** *Prerequisite: Foundation of Literacy, English 10, English 11 and Recommendation of current teacher / Evaluation of previous work by receiving teacher*

### **Required summer reading and writing will be assigned.**

Designed for the student who is able to fulfill college level assignments, this course will focus on developing effective reading, listening, speaking, viewing, research, and writing skills. Students are exposed to various genres of literature and the attendant critical thought required to comprehend them. The class will serve as an introduction to some current college-level literary theory as well. Public speaking and presentations will be emphasized. There is a Senior-Project component to this course as well. The course parallels an undergraduate, college English course. Enrolling in the Running Start - Introduction to Literature course is optional.

## **RS ADVANCED PLACEMENT ENGLISH LITERATURE**

**1.5**

**CREDIT** *Prerequisite: Foundation of Literacy, English 10, English 11 and Recommendation of current teacher / Evaluation of previous work by receiving teacher*

This course will focus on developing effective reading, listening, speaking, viewing, research, and writing skills. Designed for the highly motivated student who is able to

fulfill college level assignments, this course focuses on close reading, literary analysis, verbal participation in discussion, and complex, critical thinking. Students are exposed to various genres of literature and the attendant critical thought required to comprehend them. Students will learn to evaluate pieces of writing by analyzing background, structure, technique and theme and will learn to develop and write substantive critical analyses. The course parallels an undergraduate, college English course. Public speaking and presentations will be emphasized. There is a Senior Project component to this course as well. Students are strongly encouraged to participate in the Advanced Placement examination administered by the College Board in May. Enrolling in the Running Start - Introduction to Literature course is optional. **Required summer reading and writing will be assigned.**

### English Electives

#### **YEARBOOK**

**1**

**CREDIT** *Prerequisite: Teacher Permission*

Yearbook is a one credit elective offered in the first semester of each school year. The purpose and goal of the class is to produce the high school's yearbook which is sold and distributed in early June. The book is entirely computer generated using digital imaging and the InDesign graphics program. Students will be expected to take photographs of the events of the year, understand concepts of design to produce an effective product, meet deadlines, sell advertising, and sell the book. This class is offered on a pass/fail concept, and although the course is over in January, the book is not completed until March, and so some will be expected to continue after the credit has been earned.

#### **BROADCAST JOURNALISM**

**1/2**

**CREDIT** *Prerequisite: Teacher Permission*

This course provides the opportunity for students to learn basic journalistic and technological skills to be used in media productions. Students will research, gather, and analyze information to create media productions for broadcast to a variety of audiences. The course will conclude with a capstone project including a written and multimedia component.

**THE ART OF WRITING****1 CREDIT**

The Art of Writing provides students with the opportunity to discover their own creative voice as they write (and re-write!) narratives, poems, and creative nonfiction in order to develop real or imagined experiences or events. This course approaches creative writing from many different angles. Students will read and analyze texts from established authors in order to better understand the choices they make in their own writing. Students will learn about, and experiment with, narrative and poetic structures and forms, and storytelling techniques. Throughout this course, students are expected to share, receive feedback on, and revise their writing through a collaborative workshop model. This course concludes with the publication of an online writing portfolio.

**SHAKESPEARE ON YOUR FEET****1**

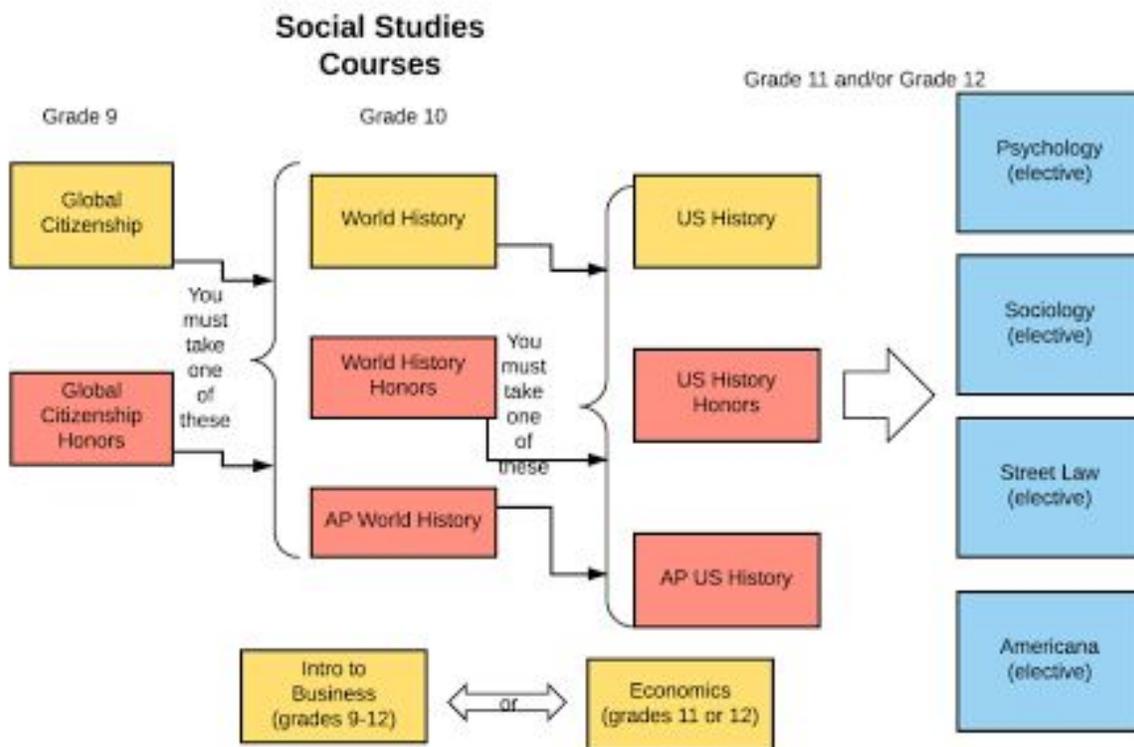
**CREDIT** This class will be a deep study of a small selection of Shakespeare's works through the lens of performance. The process will focus on familiarizing and demystifying Shakespeare's language, analyzing the writing and plot lines, learning about some of the historical context surrounding the plays and developing performances using the original and translated texts. Students will be responsible for reading, writing, creating and performing products related to their learning. There will be a culminating performance.

**LITERATURE UNBOUND****1**

**CREDIT** This class will involve a deep reading, analysis, and remix of single canonical text. Students will read deeply and write analytical and creative responses to the reading. They will also engage in productive discussions surrounding the text as well as work independently and collaborate on creative interpretations, reflections and products related to the text. The culminating product will include a writing journal, portfolio, gallery walk and live performance.

## SOCIAL STUDIES COURSE DESCRIPTIONS

### Required Social Studies Selections



### GLOBAL CITIZENSHIP

1

**CREDIT** The major goal of this course is to enable students to become responsible citizens of the 21st century. In order to do so, students will study civic ideals and government. Topics include: America's values, the Constitution, Branches of Government, Bill of Rights, voting, and others. Students will combine this knowledge

with a study of Geography, including globalization, map reading skills, the five themes of geography, and others, to analyze global connections and current events. Students will examine how they fit into the larger global world as well as the skills they need to be a successful citizen of the United States of America.

**CIVICS** (beginning in 2015-16 this course is incorporated into the Global Citizenship course which is a required one credit course for all students) **1 CREDIT**

The major goal of Civics and Government education is to enable students to become responsible citizens who are committed to preserving and enhancing American constitutional democracy. In order to achieve this goal, Civics students learn about the history, purpose, structure, and function of government. Topics include: America's values, the Constitution, the three branches of government, how a bill becomes a law, controversial issues in American society, voting, and elections. In addition, students will explore questions such as "do we need government?" and "what does it mean to be a good citizen?" through individual and group-oriented authentic/performance-based assessment opportunities.

**GEOGRAPHY** (beginning in 2015-16 this course is incorporated into the Global Citizenship course which is a required one credit course for all students) **1 CREDIT**

The major goal of Geography education is to understand our physical Earth and how humans interact with our physical environment. In order to achieve this goal, Geography students learn about topics from both physical and human geography. Topics include: maps, Geography Information System (GIS), climate, culture, food, language, political geography, and global issues. Students will explore questions such as "what does it mean to think geographically and spatially?" and "how does geography relate to my life?" through individual and group-oriented authentic/performance-based assessment opportunities that often revolve around the theme of travel.

**WORLD HISTORY** **1 CREDIT**

This course will cover the history of the world focusing on the following areas: Classical Greece, Ancient Rome & Early Christianity, the Byzantines, the Middle Ages, the Church and Reform, the Renaissance, the Reformation, the French Revolution & Napoleon, the Russian Revolutions & Stalin. While historical events themselves are unique, they are often driven by common forces. These recurring themes include power and authority,

revolution, religious and ethical systems, cultural interaction, empire building, and science and technology. We study these themes to show that around the world and through time, humans have confronted similar obstacles and have shared similar goals.

### **WORLD HISTORY - Honors**

**1**

**CREDIT** This course's organization around a limited number of key concepts instead of a perceived list of facts, events, and dates makes teaching each historical period more manageable. The three to four key concepts per period devine what is most essential to know about each period based upon the most current historical research in world history. This approach enables students to spend less time on factual recall, more time on learning essential concepts, and helps them develop historical thinking skills necessary to explore the broad trends and global processes involved in their study of AP World History.

### **RS ADVANCED PLACEMENT WORLD HISTORY Honors**

**2 CREDITS/6 CREDITS**

**LRCC** "The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Periodization, explicitly discussed, forms an organizing principle for dealing with change and continuity throughout the course. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study." (From the AP World History College Board course description)

### **U.S. HISTORY**

**1 CREDIT**

United States History is a required course for all eleventh grade students, the successful completion of which is mandatory for graduation. United States History is a topical and chronological survey of our country's social, political, economic and physical development from World War II to the present day with emphasis on major events,

trends and personalities. Throughout the course, there is concern with the examination of the “why” of our history as well as the “what”, and the vital connection of the present as an outgrowth of the past. The meaning of history to the student as a relationship to his/her role as a citizen is emphasized. United States History also includes the continuous examination of the role of New Hampshire throughout the American experience. Also included and emphasized are geographical skills/concepts and place geography knowledge development.

### **U.S. HISTORY - Honors**

**1**

**CREDIT** United States History - Honors is offered to juniors who have been accepted into the course. It is designed to fulfill the state-mandated course with additional work in critical thinking and with more emphasis on primary and secondary source materials to meet the needs of juniors who plan to attend a four year college program. United States History Honors is a topical and chronological survey of our country’s social, political, economic and physical development from the World War II to the present day with emphasis on major events, trends and personalities. Students will be asked to analyze, to reflect and to think critically. Students will be asked to develop their writing skills and their research skills in two major papers.

### **ADVANCED PLACEMENT UNITED STATES HISTORY Honors**

**2 CREDITS**

The AP program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship. The course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgement and to present reasons and evidence clearly and persuasively in essay format. **Summer work is required in this course**

(The College Board, 5/97)

### **ECONOMICS**

**.5 CREDITS**

Economics is the study of the allocation and utilization of limited resources to meet

society's unlimited needs and wants, including how goods and services are produced and distributed. Through economics, students examine the relationship between costs and benefits. They develop an understanding of basic economic concepts; economics in history; how economics affects and is affected by the individual; cycles in the economy; financial institutions and government; and international economics and trade. The goal of economic education is to prepare students to make effective decisions as consumers, producers, savers, investors, and as citizens.

## Social Studies Electives

### **AMERICANA**

**1**

**CREDIT** *Prerequisite: Successful completion of US History*

Americana is a one credit social studies course open to juniors and seniors. This will be a class that looks at Pop Culture in American History from the 1940's to the 1990's. Topics to be covered include: Movies, Television, Music, Broadway, Sports, Art, Literature, Fads and Advertising. By taking a close look at how Pop Culture has influenced Americans over the time frame, students will be able to discover how culture impacts society. Students will have to use analytical and critical thinking skills as they work their way through the course.

### **INTRODUCTION TO PSYCHOLOGY**

**1 CREDIT**

*Prerequisite: Students must be a junior or a senior*

Psychology is designed to give upperclassmen an overview to the study of psychology with various areas of emphasis and to gain a better understanding of people. It is aimed at meeting the needs of juniors and seniors who plan to further their education. Students will be required to develop critical reading and thinking skills. They will be expected to draw conclusions by applying the textbook knowledge and enrichment activities to personal experiences. This course is a very traditional introduction to psychology. It allows for the students to have a secure foundation in the various fields of psychology. It is through this foundation that the students will gain an understanding of themselves, behavior and society.

### **SOCIOLOGY**

**1 CREDIT**

*Prerequisite: Students must be a junior or a senior*

Sociology is designed to expose upperclassmen to the study of society. A central concept to sociology is that of the sociological imagination which allows sociologists to make connections between personal experiences and larger social issues. Students will be introduced to a range of basic sociological principles so they can develop their own sociological imagination. Students will learn about the origins of sociology as a discipline and be introduced to major sociological theories and methods of research. Students will develop their sociological imaginations by relating the topics and theories they learn about to their own life experiences.

**STREET LAW**

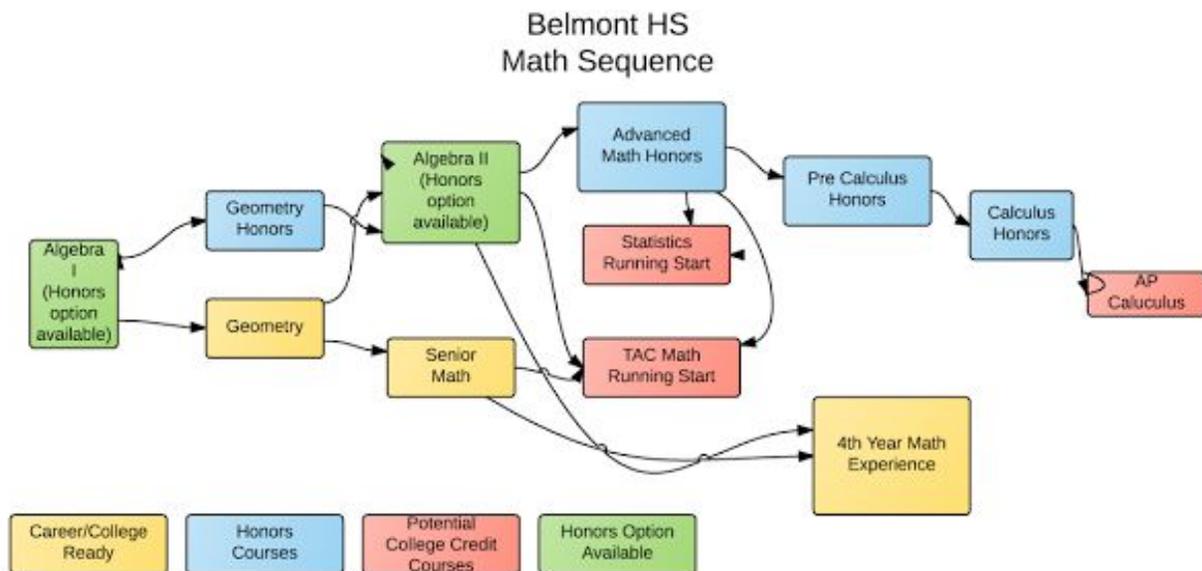
**1 CREDIT**

*Prerequisite: Must have successfully completed Global Citizenship or Civics*

Street Law is a practical course in the basics of law and the American legal system. Students will learn about their rights and responsibilities as citizens, and the ramifications for breaking the law. Through analysis, discussion, and debates with classmates, as well as personal research, students will evaluate basic legal problems and principles and apply the knowledge to their own lives, so as to protect themselves and live in better harmony with other members of society.

**MATHEMATICS COURSE DESCRIPTIONS**

**Mathematics Selections**



## **ALGEBRA I (Honors option available)**

**1**

**CREDIT** Algebra I is designed to provide a strong foundation of mathematical concepts and applications in order to prepare students for more advanced work in mathematics or science fields. Students develop quantitative reasoning and problem-solving skills, and develop an awareness of the connection between mathematics and other disciplines by modeling real world situations. This course utilizes various learning and teaching styles. Students are encouraged to be active learners by analyzing and interpreting given information and formulating conjectures. Students explore mathematics in individually and group-oriented activities and may use journal writing to develop the ability to understand and to communicate mathematical ideas effectively. An imbedded **honors option** is available which will include studying additional topics independently with guidance and assessment. All students are expected to be independent learners and are encouraged to research problems and perform assignments at a higher level.

## **GEOMETRY**

**1 CREDIT**

*Prerequisite: Algebra I*

Geometry is designed to introduce students to the relationship between mathematics and the shapes in his/her surroundings. The course uses an informal approach to the study of shapes, their size (i.e. measurement) and its application in practical ways to the solution of real-world problems. This course emphasizes the learning of geometric properties in an experiential, hands-on approach through graphing, drawing, designing and paper folding. The course begins with the introduction of given facts and observations and by a process of inductive reasoning arrives at the body of geometric properties. The course progresses from the introduction of the basic undefined terms of geometry (points, lines and planes) through a study of plane and solid figures to a study of elementary trigonometry.

## **GEOMETRY - Honors**

**1 CREDIT**

*Prerequisite: Algebra I; Teacher Permission*

Geometry Honors is a course designed to show students the relationship between mathematics and real-world applications in a very formal setting. Writing proofs is an integral part of the course and allows students to develop the logical and sequential

steps necessary to produce a finished product. This course, although traditional in content, enables students to work collaboratively on many assignments. They learn to be educators as well as students through active participation. This course uses a variety of manipulatives and constructions to strengthen students' understanding of geometrical concepts. They also become aware of the interrelationship between algebra and geometry topics. Students are strongly encouraged to pursue alternate methods of solving problems and are often asked, sometimes through journal writing, to explain solutions to problems solved by themselves or someone else.

**ALGEBRA II (Honors option available) 1**

**CREDIT**      *Prerequisite: Algebra I and Geometry*

Algebra II relies heavily on the foundations and material presented in Algebra I. One of the most important transferable concepts to be learned and practiced is problem solving (building academic stamina, perseverance, and developing strategies). The topics to be studied include Quadratic Functions and Factoring; Polynomials and Polynomial Functions; Complex Numbers; Exponential Functions; Rational Exponents and Radical Functions. Graphing is imbedded in all topics as is solving real world problems. Technology tools are taught and used in the context of the course. An embedded **honors option** is available which will include studying additional topics independently with guidance and assessment.

**ADVANCED MATH - Honors 1**

**CREDIT**      *Prerequisite: Algebra II and all prior prerequisites; Teacher Permission*

Advanced Math will extend and reinforce Algebra and problem solving skills. The topics include more complex Factoring, Solving Rational Equations, Exploring Exponential and Logarithmic Functions, Trigonometric Ratios and Functions with Applications. Students need a high level of commitment, academic endurance and self-motivation in order to be successful in this course.

**PRECALCULUS - Honors 1**

**CREDIT**      *Prerequisite: Advanced Math and all prior prerequisites; Teacher Permission*

Pre-Calculus is an honors level course designed to provide a strong foundation of pre-calculus concepts and applications in order to prepare students for more advanced

work in mathematics and science at the post-secondary level. Students deepen their quantitative reasoning and problem-solving skills, and develop an awareness of the connection between mathematics and other disciplines by modeling real world situations. This course utilizes various learning and teaching styles. In addition to the traditional lecture technique, students are encouraged to be active learners by analyzing and interpreting given information and formulating conjectures. Students explore mathematics in individually and group oriented projects. This course makes use of technology to support and extend the teaching and learning of pre-calculus concepts. Students need a high level of commitment, academic endurance and self-motivation in order to be successful in this course.

### **CALCULUS - Honors**

**1 CREDIT**

*Prerequisite: Pre-calculus and all prior prerequisites; Teacher Permission*

Calculus is designed for students who want to continue their study in a rigorous mathematics course which will enhance their potential success in pursuing a science or mathematics oriented career. Although this is not an advanced placement course, the material covered is that which is ordinarily covered in a regular college Calculus I course. The emphasis during the year is on understanding, not to get through a certain number of topics. Throughout the year, greater understanding of topics covered in previous mathematics courses is stressed. Much effort is made to analyze questions before answering them. Functions, inequalities and graphing concepts are examined on a much more abstract level than is done in algebra and geometry courses. This course enables students to work collaboratively on many assignments and encourages them to question much of their own work. They develop hypotheses and test those using technology. Students need a very high level of commitment, academic endurance, and self-motivation in order to be successful in this course.

### **ADVANCED PLACEMENT CALCULUS (AB)**

**.5**

**CREDIT**

*Prerequisite: Calculus and all prior prerequisites; Teacher Permission*

Advanced Placement Calculus (AB) is a continuation of Calculus and is designed for students who plan to attend college and would like to earn college credit while at Belmont High School. Calculus AB is primarily concerned with further developing the student's understanding of the concepts of Calculus and providing experience with its

methods and applications. The course emphasizes a multi-representational approach to calculus with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. The connections among these representations are also stressed. A passing grade on the national College Board AP exam may entitle students to college credit or waive taking a required college math course. Included in this course is a required paper addressing the importance of mathematics related topic. This paper consists of four areas: background information on the topic; who is given credit for discovering or inventing it; historical data of the time(s) in which it was discovered or invented; and interpretation by the student as to its importance. Students will also give an oral presentation thus developing their communication skills. Students will need a very high level of commitment, academic perseverance, self-motivation, and be willing to put in extra study time in order to be successful in this course.

## **RS STATISTICS - Honors**

**1 CREDIT/3 CREDITS**

**LRCC** *Prerequisite: Algebra II and all prior prerequisites; Teacher Permission*

Statistics is an introductory course in statistics and probability covers analysis of single and bivariate data, algebraic and graphical analysis, sample statistics, probability, probability distributions, sample variability, sample distributions, the Central Limit Theorem, estimation, and hypothesis testing. Emphasis is on applications throughout the course.

## **"TWO-TIER" Math Partnership with NH Community College System**

### **FOUNDATIONS OF COLLEGE MATH (Formerly Senior Math)**

**1 CREDIT**

*Prerequisite: Algebra I and Geometry*

Foundations of College Math is a survey course, focusing primarily on the algebra skills needed to enter the workforce or postsecondary education. Students will develop facility in simplifying and evaluating polynomial and rational expressions, as well as solve linear equations and inequalities, quadratic equations and systems of linear equations. Emphasis will be placed on applying these skills in solving real world problems.

## RS TOPICS IN APPLIED COLLEGE MATH (TAC MATH)

1 CREDIT/3 CREDITS

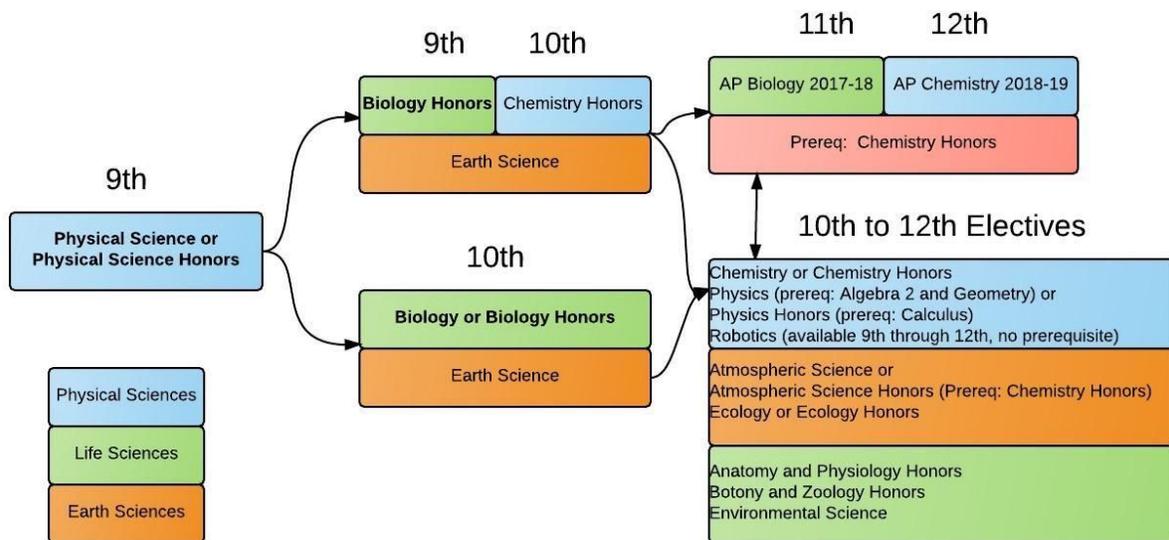
LRCC

*Prerequisite: Algebra II and all prior prerequisites; Competency as determined by the mathematics placement exam; Teacher Permission*

TAC Math is designed to expose the student to a wide range of general mathematics. Problem Solving and Critical Thinking Skills - along with the use of technology - will be emphasized and reinforced throughout the course as the student becomes actively involved solving applied problems. Topics to be covered include: Number Theory and Systems, Functions and Modeling, Finance, Geometry and Measurement, Probability and Statistics, and selected subtopics related to the student's major field of study.

## SCIENCE COURSE DESCRIPTIONS

### Required Science Course Selections



### PHYSICAL SCIENCE (Honors option available)

1

**CREDIT** This course is designed for freshman students, as the first part of the core sciences. The course focuses on the three main areas of Matter, Energy and Motion.

Analysis of physical and chemical properties and the structure of matter comprise the opening two units. The third unit covers motion and energy transfer and the fourth unit covers wave behavior and electromagnetism. Students will gain the necessary skills and knowledge for more advanced electives and the authentic connections and conceptual approach will give students of all levels the skills to succeed in any of the general level electives. Responsibilities will include report writing, qualitative and quantitative analysis, and use of multimedia technology. Credit for Physical Science is based upon the successful completion of the course competencies.

## **BIOLOGY**

**1**

**CREDIT**      *Prerequisite: Successful completion of Physical Science*

Biology of Living Things is a general life science program which will include the study of cell biology, biochemistry, genetics and heredity, evolution, taxonomy, botany, zoology, microbiology, and human anatomy and physiology. There will be strong emphasis on collaborative learning and gaining problem-solving skills. Real world issues will be studied and students will be encouraged to think critically and form opinions. Grading is based on successful completion of projects, test and quiz scores and class work (including daily participation) and homework.

## **BIOLOGY - Honors**

**1**

**CREDIT**      *Prerequisite: Successful completion of Physical Science*

Biology - Honors is a sophomore level, college preparatory course. It is a survey course which illustrates the fundamental principles of biology using an ecological approach. Principles such as evolution, cellular and organism reproduction, interaction of organisms and environment, comparison of structure and function, organism regulation, and homeostasis are integral parts of this class. The interrelationships among organisms, organism systems, and their niche in the environment are constantly stressed.

## **Science Electives**

## **CHEMISTRY**

**1**

**CREDIT**      *Prerequisite: Physical Science and Biology*

This lab-based science course is designed for the college preparatory level students as part of the core sciences. Students will study the nature of matter and the dynamics of chemical reactions. The course will present the basics of chemical research and analysis in preparation for college chemistry coursework. Responsibilities will include report writing, qualitative and quantitative lab analysis, and various applications of analytical technologies. Course credit is awarded based upon successful completion of the course competencies.

**CHEMISTRY - Honors** **1**

**CREDIT** *Prerequisite: Physical Science and Biology*

This lab-based science course is designed for the Honors level student as part of the core sciences. Students will study the various structures and behaviors of matter, including the dynamics of chemical properties and reactions. The course will present the basics of chemical research and analysis in preparation for rigorous college coursework and/or a science-oriented career path. Responsibilities will include report writing, qualitative and quantitative lab analysis, and various applications of analytical technologies. Course credit is awarded based upon successful completion of the course competencies.

**ADVANCED PLACEMENT CHEMISTRY** **2**

**CREDITS** *Prerequisite: Physical Science Honors, Biology Honors, Chemistry Honors*

This year-long, lab-based course follows the AP curriculum for Chemistry. Students will study sub-atomic structure, molecular structure, matter-matter and matter-energy interactions, and various forms of quantitative analysis of chemical behavior. Students will be prepared for, and expected to take the AP Chemistry Exam given in the Spring. This course is offered only every other year, opposite of AP Biology. Course credit is awarded based upon successful completion of the course competencies.

**PHYSICS** **1**

**CREDIT** *Prerequisite: Physical Science, Biology, Algebra II, and Geometry*

This lab-based science course is designed for the College Preparatory level student as part of the core sciences. The course will present the basics of physical systems, energy transfers, and analysis with an emphasis on mathematical modeling (including algebra

and trigonometry principles) and application-based scenarios. Responsibilities will include report writing, qualitative and quantitative analysis, and application of various analytical technologies. Course credit is awarded based upon successful completion of the course competencies.

### **PHYSICS - Honors**

**1**

**CREDIT** *Prerequisite: Physical Science, Biology, Calculus*

This lab-based science course is designed for the Honors level student as part of the core sciences. The course will present the basics of physical systems, energy transfers, and analysis with an emphasis on mathematical modeling (including advanced math and calculus principles) and application-based scenarios. Enrolled students are prepared for rigorous college coursework and/or science oriented career path. Responsibilities will include report writing, qualitative and quantitative analysis, and application of various analytical technologies. Course credit is awarded based upon successful completion of the course competencies.

### **HUMAN ANATOMY AND PHYSIOLOGY (Honors option available)**

**1**

**CREDIT** *Prerequisite: Biology or Biology Honors (teacher recommendation), successful completion of chemistry is highly recommended but not required.*

In this elective course you will explore human anatomy and physiology. You will understand the amazing machine known as the human body and gain insight to the structure and function of the major systems in the human body. This course is research based, **with dissection labs**. Students will learn to write scientific review papers; a good skill to have for any college bound student going into any of the sciences. This is a college preparatory class and will benefit any student seeking a career in medicine, physical therapy, pharmacy, sports medicine, early childhood development, veterinary sciences and biology.

### **ENVIRONMENTAL SCIENCE (Honors option available)**

**1 CREDIT**

*Prerequisite: Biology*

In this elective course, you will explore the problems and discover solutions to human sustainability. You will explore agricultural practices, energy sources, fresh water sources, global human population, and climate change and their effects on humans and the environment. You will look at both sides to every problem and solution and learn to make educated and informed opinions about environmental issues.

## **ADVANCED PLACEMENT BIOLOGY**

**2**

**CREDITS** *Prerequisite: Biology. Students are also required to have successfully completed chemistry or be enrolled in chemistry concurrently with AP Biology.*

This course is a college level class designed for students seeking to challenge and expand their understanding of biology as well as better prepare themselves for college. The class involve complex and in depth labs such as genetically modifying organisms and analyzing DNA as well as student directed research and teaching. **SUMMER WORK will be required for this course. This course is offered only every other year, opposite of AP Chemistry.**

## **BOTANY AND ZOOLOGY - Honors**

**1**

**CREDIT** *Prerequisite: Biology*

The course will consist of one academic quarter of botany and one academic quarter of zoology. The botany portion of the course will examine the study of mosses, ferns, angiosperms and gymnosperms. Students will study plant reproduction, habitat, and identify various plant life indigenous to the region. The zoology portion will examine various invertebrate and vertebrate animals. Body systems, habitats, evolutionary significance, and taxonomy of invertebrate and vertebrate animals will be studied. Invertebrate and vertebrate dissections will emphasize structure and function, with an understanding of comparative anatomy. **Animal dissections** are a significant part of the zoology portion, which should be considered before taking this course.

## **ECOLOGY (Honors option available)**

**1**

**CREDIT** *Prerequisite: Biology, Chemistry. Earth Science is recommended but not required.*

This is a hands-on, field based course that focuses on the development of STEM based research and problem solving skills. Through collecting and analyzing data, students will

understand how climate, weather, elevation, geology and nutrient cycling (abiotic factors) influence plant and animal life (biotic factors) in a given biome. In this course students will study shifts in biomes through exploration in the field. Students will gain skills collecting data as well as analyzing, synthesizing and hypothesizing various abiotic factors that influence the biotic.

**ATMOSPHERIC SCIENCE (Honors option available) 1**

**CREDIT** *Prerequisite: Physical Science, Biology (Honors Prerequisite: Chemistry Honors)*

Atmospheric Science is a college level class designed to gain a better understanding of how the physical and chemical properties of the atmosphere and surface combine to dictate the transfer of energy through Earth's Atmosphere. This class challenges students to learn about all aspects of the atmosphere ranging from structure, weather, and climate through student driven inquiries and genuine scientific research opportunities. Students pursuing honors credit will further explore the statistical nature of these systems and how they behave in order to model processes in a way that gives better insights into their predictability.

**BIO-MEDICAL TECHNOLOGY - Honors 1**

**CREDIT** *Prerequisite: Successful completion of Biology and Chemistry*

Biomedical technology is a one credit elective for Juniors and Seniors. It is designed to cover introductory biochemistry, analytical and biomanufacturing processes, and bioethics. Students will work with basic lab equipment and also more advanced biochemical equipment. Students will be able to work both individually and collaboratively on a variety of tasks including; research, problem solving, experimentation design, lab execution, and presentation.

**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AND STEM COURSE DESCRIPTIONS**

**ICT: REQUIRED FOR ALL STUDENTS .5 CREDIT**

Students entering BHS from BMS will have already completed this high school graduation requirement and that course and credit will be transcribed upon their high school enrollment.

## **MOBILE APPLICATIONS**

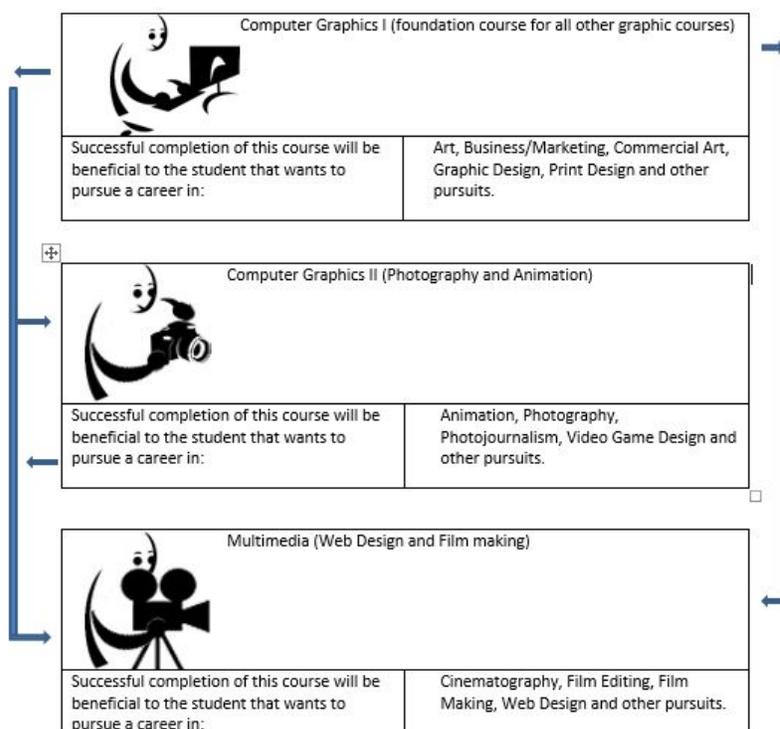
**1**

**CREDIT** *Prerequisite: None, but recommended Java I.*

This course is an AP level course in which students will explore the seven basic principles of computer science. These ideas are: creativity, abstraction, data and information, algorithms, programming, the internet and global impact. Students will develop socially responsible mobile applications and will be prepared to take the Computer Science AP exam after taking this course.

## Computer Graphics Courses

We live in a visual society. Your ability to communicate visually will enhance your prospects for success in many careers. Here are a few examples:



**RS COMPUTER GRAPHICS I-DESIGN SOFTWARE ESSENTIALS 1 CREDIT/3 CREDITS**  
**LRCC**

In this course students cover the necessary functions of Adobe Photoshop and Illustrator. These are the two major 2D image creation and editing softwares. These programs form the foundation of digital imaging in both print screen and video graphics. Students will learn through several lab assignments that cover pixel manipulation, composing, adjusting, and resizing in Photoshop. In Illustrator, students will learn how to properly and efficiently manipulate vectors; how to create and use color properly, and finally how to efficiently output vector images for screen or print. Concepts learned in this course carry over into animation, motion graphics, 3D design, and more.

**RS COMPUTER GRAPHICS II 1 CREDIT/3 CREDITS**

**LRCC** *Prerequisite: Students must have earned an 85 or better in Computer Graphics. Teacher permission is also required.*

Computer Graphics II combines Digital Photography and Animation. Digital Photography gives students a chance to sharpen their skills by studying what makes a good photograph instead of a snapshot. Some time will be spent using Photoshop to manipulate digital images to create different artistic presentations. Flash, along with Illustrator, will be the software that we will be using to create animations. Multimedia presentations include, but are not limited to, PowerPoint, Moviemaker video production and audio/enhanced podcast. College credit is available through Lakes Region Community College / Project Running Start for Digital Photography.

### **RS COMPUTER GRAPHICS III - Honors**

**1 CREDIT/3 CREDITS**

**LRCC**                    *Prerequisite: Students must have earned a 93 in the previous level II course to move to level III. Teacher permission is also required.*

Computer Graphics III in the first two courses, the students have been introduced to a number of different areas of computer graphics. In the independent study course, the student, with instructor help, will design a course of study that advances them in their area of interest and strengthens deficiencies. Students should come into the course with a draft of what they wish to study plus their portfolio so their work can be reviewed. Space for this course is limited. Students will be selected for this course by approval of the instructor based on previous grades, strength of portfolio and the draft of what they propose to study.

### **RS WEBSITE DEVELOPMENT/MULTIMEDIA - Honors**

**1 CREDIT/3 CREDITS**

**LRCC**                    *Prerequisite: Students must have earned a "C" in Computer Graphics I. Teacher permission is also required.*

This course offers an introduction to Website Development/Multimedia. Students will be introduced to industry-standard tools/software. They will use their creativity and skills to create and edit multimedia presentations, digital images, sound, movies, and websites. Our school site is an example of previous students' work. The knowledge and skills acquired in this class will enable students to successfully perform and interact in today's technology-driven society.

## **STEM**

**1**

**CREDIT** *STEM - Science, Technology, Engineering and Mathematics.*

This course is intended to provide some learning experience in each of the four areas over the semester in a project based and hands-on learning environment. STEM education projects and topics may focus more on one or other of the four stated areas or may dovetail two, three or all four of the areas. The course is based on areas of student interest, guest presenters, experiential learning, problem solving, projects, media oriented communication, and field trip opportunities during and after school. Topics may include, but are not limited to, Aviation/Flight, Astronomy and Space, Computer Controlled Devices, Computer Programming, Remote Controlled Items, Rockets, Models, Robotics. All topics will not be covered in one course.

## **ENGINEERING**

**1**

**CREDIT** The backbone of this engineering class is the SolidWorks Computer Assisted Design (CAD) program. Using this industry standard software program, students will use a 3D design approach to sketch and create a model that can be visualized in three dimensions. Students will learn to create parts, mate parts, build assemblies from parts or other assemblies, and create 2D drawings of their 3D models. Students will learn the basics of 3D printing and will 3D print items they designed themselves in SolidWorks.

## **RS ASTRONOMY AND SPACE EXPLORATION**

**1 CREDIT/4 CREDITS**

**NHTI** *Prerequisite: Algebra I*

Astronomy and Space Exploration is a STEM-based introductory course studying the entire universe from the nucleus of the atom to distant galactic clusters and everything in between. We will study planets, moons, stars, nebulae, galaxies, the tools of the astronomer, spectroscopy, black holes, and more. We will spend time outside familiarizing ourselves with the day and night skies and use telescopes to observe what is currently visible in our sky. We will interact with scientists doing current astronomical and space research while learning about on-going space missions. There are required observation sessions, independent field trips, and class field trips.

## **WORLD LANGUAGE COURSE DESCRIPTIONS**

## Primary Expectations for Student Learning

- Present and Respond
- Civic and Social Responsibility
- Global and Cultural Awareness

### **FRENCH I**

**1 CREDIT**

French I is designed to meet the foreign language component of the college bound student's high school curriculum as well as the needs of any student who desires to be proficient in a second language. It is also designed to assist students with organizational and study skills, practice in reading for meaning of a variety of texts and technology sources, and time management skills. Language function, comparisons and connections will be emphasized such as converting time, speed, currency and temperatures to the metric system. Throughout the academic year the students will study French through a variety of situations common to daily life in France and francophone countries. The students will be required to memorize vocabulary and grammatical structures in order to accurately communicate in French. Students will be expected to develop skills necessary to understand spoken and written language as well as to respond orally and in writing. All students will be required to work collaboratively and individually for mastery of subject material.

### **FRENCH II**

**1 CREDIT**

*Prerequisite: French I*

French II is designed to continue the second part of meeting the foreign language component of the college bound student's high school curriculum as well as the needs of the student who desires oral proficiency. It is also designed to assist students with organizational and study skills, practice in reading for meaning of a variety of texts and technology sources, and time management skills. Language function, comparisons and connections will be emphasized such as converting time, speed, currency and temperatures to the metric system. As in French I, the students participate in situations common to those in which one finds oneself in francophone country. Students will complete a long-term project in which they will pretend to move to Paris. Daily class activities will develop the students' abilities in the four skill areas of listening

comprehension, reading, writing, and speaking in French. At this level more original expression in the language will be required and students are expected to speak French as much as possible.

### **FRENCH III - Honors**

**1**

**CREDIT** *Prerequisite: French II*

French III is designed to provide an arena in which the college bound student will enhance his communication skills in the target language of French. It is also designed to assist students with organizational and study skills, practice in reading for meaning of a variety of texts and technology sources, and time management skills. Language function, comparisons and connections will be emphasized such as converting time, speed, currency and temperatures to the metric system. Throughout the academic year the students will study France, French culture, French history and French politics. Students will draw on the mastery of basic grammar skills from the preceding two years in order to participate in activities. The text is used to continue to build vocabulary and grammar. Reading material of various levels will be offered in order to augment the vocabulary and grammar. Classes are held in the target language as much as possible.

### **FRENCH IV / V - Honors**

**1**

**CREDIT** *Prerequisite: French III-Honors*

French IV / V is designed to meet the needs of a college bound student. It serves as a year during which the student may practice the skills mastered during the previous three to four years. It is also designed to assist students with organizational and study skills, practice in reading for meaning of a variety of texts and technology sources, and time management skills. Language function, comparisons and connections will be emphasized such as converting time, speed, currency and temperatures to the metric system. Units are built according to different themes that include a great deal of new vocabulary in addition to more complicated grammatical structures. Possible topics include: French for business, art and music, current events, film, and literature. Classes will be held entirely in the target language.

### **SPANISH I**

**1**

**CREDIT** Spanish I is designed to meet the foreign language component of the

college-bound student's high school curriculum. It is an introduction to both language and culture. It is also designed to prepare a student with organizational, time management and study skills. Students will study a variety of situations common to daily life in many Hispanic settings. Critical thinking, values comparisons, mathematical functions and technology will be incorporated. Students will be required to memorize vocabulary and grammatical structures to establish a foundation for accurate communication. Students will develop skills to understand and respond to spoken and written language. Students will be required to work collaboratively, cooperatively and individually for mastery of the subject material. The text and affiliated materials are used as the scope and sequence for the Spanish I curriculum.

## **SPANISH II**

**1**

**CREDIT** *Prerequisite: Spanish I*

A sequential course, Spanish II builds on the proficiency gained in Spanish I. Grammar and vocabulary are studied more intensely to allow students a better command of the language. Students will show their competency and control of the subject material providing more detailed responses. Increasingly more difficult structure and content are expected in written and oral language. Authentic performance and assessment opportunities will be situational. Students will reflect on their success and that of their classmates. Error correction and learning from mistakes is an integral part of the process. The skills gained in this course will serve as a basis for more advanced study. The text and associated materials are used as the scope and sequence of the curriculum.

## **SPANISH III - Honors**

**1**

**CREDIT** *Prerequisite: Spanish II*

Spanish III continues to reinforce and expand the skills learned in the first two years of language study. Students are required to show mastery of more complex grammatical features and functions. Writing skills will be assessed through the writing process, error corrections and peer analysis. Assignments relate to the history of Spain, poetry, legends and short stories. Culture, contemporary issues and values are studied through readings, music and media from different geographical areas. Students will study topics related to their future aspirations and vocations. A combined language text/workbook, readers and collections of poetry are used to enhance the Spanish III curriculum.

## **SPANISH IV - Honors**

**1**

**CREDIT** *Prerequisite: Spanish III-Honors*

Spanish IV further develops students' communicative and interpretative skills. Students will read and study a number of literary works. Students will examine literal and figurative form and meaning. Various literary genres, devices and values will be incorporated as the course progresses. Students will research Hispanic artists, authors, musicians and components relevant to future professions and goals of individuals in the class. Research, reading and writing will help them understand issues and competition they will face in the global marketplace. Students will show their oral proficiency attempting to use only the target language to communicate. The student is expected to accomplish independent/individual study projects in addition to collaborative assignments. Readers and news will be used to enhance the curriculum.

## **BUSINESS EDUCATION COURSE DESCRIPTIONS**

### **INTRODUCTION TO BUSINESS**

**1**

**CREDIT** Introduction to Business course is an introductory-level course open to students in grades nine through twelve. In addition to meeting the state requirement for economics, the course is designed to accomplish the following purposes:

1. Introduce the student to the American economic system and the various roles played by individuals, businesses, and the government within that system.
2. Introduce the student to the variety of roles and functions required to operate a business.
3. Prepare the student for further training and study in business.

Students will analyze case studies and events affecting the U.S. economy and businesses, develop a business plan for a company of their choice, and participate in a competitive online business management simulation against other students throughout New Hampshire. ***This course can also fulfill the ½ credit Economics requirement.***

### **FINANCIAL LITERACY**

**1**

**CREDIT** *Financial Literacy is also listed as a Family and Consumer Science course*

Money, money, money, money! Some people let money control their lives, while others take control of their finances and make money work for them. Getting started early can make a huge difference when it comes to managing your money. The Financial Literacy course is an introductory-level course open to students in all grades but particularly useful for students in grades eleven and twelve. The course is designed to provide students with the basic skills and knowledge needed to effectively manage their personal finances. Topics covered include the following:

1. An overview of personal financial management
2. Budgeting
3. Banking and checking accounts
4. Savings and investments
5. Credit and credit risks
6. Risk management and insurance
7. Careers, income, and taxes
8. The wise consumer

Students will work in an activity and project-based environment to learn and use very practical skills related to maximizing what your money can do for you.

## **ACCOUNTING**

**1**

**CREDIT** Everybody loves to make money! When it comes to business, understanding the numbers and how to manage them is a key to becoming profitable. Accounting I will provide students with an introduction to basic accounting concepts, including debits, credits, and the accounting equation. Students will also learn about the entire accounting cycle, including recording transactions, preparing financial statements, and closing the books for a small business or proprietorship. Concepts covered in class will help prepare students who wish to study business or accounting in college, open their own business, or simply manage their own personal finances.

## **FINE AND PERFORMING ARTS COURSE DESCRIPTIONS**

**DRAWING** **1**

**CREDIT** This introductory course will be solely observational drawing using different materials, subject matter and techniques. Portraits, still life, figure and landscape drawing will be included and sketchbook work is mandatory.

**PAINTING** **1**

**CREDIT** *Prerequisite: Drawing*

This class focuses on learning how to paint representational imagery. A solid grasp of observational Drawings imperative; understanding spatial relationships, the difference between real and imaginary space and value. The goal is to demonstrate, with paint, how to portray light traveling across the surface of an object. Color theory and color mixing will be emphasized as the vehicle to attain realism. The class will use both watercolor and acrylic paints. Painting can be highly frustrating so this class is very challenging. Light source, value, tints, shades, realism, positive and negative space, and ground all must be integrated into each painting. Careful observation of each object and accurate drawing of each object prior to painting will be as important as the actual painting. Each aspect will be evaluated.

**ADVANCED ART - Honors** **1**

**CREDIT** *Prerequisite: Successful completion of Drawing. Student must have earned a 93 in the previous level II course to move to level III or have earned an 83 in the previous level III course to stay in level III. Teacher permission is also required.*

Advanced Art offers junior and senior students with studio experience a background that will more thoroughly prepare them for a career in visual arts. These students may be considering further study at an art school or university. Advanced Art is designed to develop a sense of craftsmanship, artistic and aesthetic maturity and a responsibility to one's personal growth. Through focused individual and group studies of works of artists from the second half of the century, the students will make identifications with contemporary issues. They will find their own voice as artists through experimentation with various mediums of their own choosing as well as assigned projects. The technical skills that were developed in the previous classes will continue to be enhanced through experiences that require a variety of media and processes.

## **ADVANCED PLACEMENT STUDIO ART**

**1 CREDIT**

*Prerequisite: Successful completion of Advanced Art. Student must have earned a 93 in the previous level II course to move to level III or have earned an 83 in the previous level III course to stay in level III. Teacher permission is also required.*

The AP Studio course is geared towards the development of becoming an independent thinker as well as an informed and critical decision-maker through the development of a portfolio that is personal to your individual talents and interests, while demonstrating at a mastery level through the development of a Drawing portfolio, 2-D design portfolio, or 3-D design portfolio. You must be driven and understand this will not be like any art class you have ever taken before.

## **BAND**

**1**

**CREDIT** Band is open to all students grades 9-12 who meet minimum requirements. Throughout the year, students build on their musical knowledge and increase their skills in using the vocabulary and notation of music. They will be expected to learn a large number and variety of types of musical pieces. Students will also develop increased expertise and confidence in musical performance. Ensemble and solo performance is encouraged, in addition to participation in full band and/or stage band. Performance is an integral part of the Belmont High School Band. The band plays a vital role within the school, the communities of Belmont and Canterbury and also throughout the northern New England region. Band students are active within the school by performing in the annual Holiday Concert, Spring Concert and graduation ceremonies. There are also frequent appearances in assemblies, sporting events and musicals. In the wider communities of Belmont and Canterbury, band members are required to attend Memorial Day parades, Old Home Day parades, and the annual Gazebo Concert. And in the region, band members participate in music festivals, march at the Eastern States exhibition, numerous Fourth of July and Christmas parades and are involved in exchanges with other schools in neighboring states. In all of these settings, band members are representative of Belmont High School. From this, students gain a sense of pride as they contribute to their community and learn to appreciate the value of working together towards a common and concrete goal. Attendance at concerts and performances is required and absence from events will affect final grades.

## **CHORUS**

**1**

**CREDIT** Chorus is an elective class for high school students who desire either to sing or to learn about singing both individually and in a group. The course is open to all who wish to take it, having demonstrated some basic musical abilities such as pitch comprehension (ability to match a pitch) and a desire to expand energy creating and learning the choral art. Students may take the course regardless of any amount of prior musical experiences. The course centers around the arts of vocal and choral singing, vocal aspects focusing on solo singing and choral on group singing. Throughout a year's participation in the course, the student will be required to show proficiency and improvement in choral skills, musical knowledge and vocal production. Chorus can be taken for a half year, a whole year, four years or any combination in-between. The course is not sequential, and so can allow the students to add or drop at appropriate times during their matriculation at Belmont High School. Musical vocal expression is an outlet for many students of varying musical ability. The process of learning how to use this tool of self-expression requires a course of study involving different methods of its creation and knowledge of the art itself. Learning how to vocally express oneself involves, among other things, knowledge of how to match pitches to a piano and other vocalists, how to create a pleasing vocal tone that fits into the specific style of song sung, how to make sure that one's expression can be interpreted correctly by the listener and how the grouped singing of a chorus differs from a solo performance basis: one must perform musically in a trial and error format in order to learn how best to express exactly what one is trying to express. Classes in the performing arts, such as Chorus, are in place to give the student these opportunities. Attendance at concerts and performances is required and absence from events will affect final grades.

## **FUNCTIONAL MUSICIANSHIP I**

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**CREDIT** In Functional Musicianship I, students will learn the very basics of music reading, writing and analysis. The use of keyboards, percussion instruments and voice will aid students in their understanding the above state musical concepts. The goal of this course is to increase students' ability to use music throughout their lives as a creative outlet, and will provide them with the tools necessary to continue their musical advancement throughout secondary education, in addition to providing them with the

skills to create their own music. Students do not need to have any prior knowledge of music to take this course.

**FUNCTIONAL MUSICIANSHIP II** **.5**

**CREDIT** *Prerequisite: Functional Musicianship I or teacher permission.*

In Functional Musicianship II, students will continue learning concepts to aid them in the creation of their own music. Keyboard/piano skills will be continued, as will their theory concepts. Chord progressions and the creation thereof will become more intricate as will the rhythmic and melodic aspects of the music. Students will also be learning about different musical periods and a brief history of music. In Functional Musicianship II, it is very likely that students will progress at different rates, and instruction will be based on each student's skill level. At the end of the course, students will be able to play a variety of repertoire on piano, will be able to comfortably write their own music and perform, and will be able to analyze different genres of music.

## HEALTH COURSE DESCRIPTIONS

**HEALTH** **1**

**CREDIT** Health is a required course for ninth graders. The Health Education course at Belmont High School addresses the physical, mental and social dimensions of health. The course is designed to motivate and assist students to maintain and improve their health, prevent disease and reduce health-related risk behaviors. The goal of this course is to develop "health-literate" citizens. They will be encouraged to look closely at their own lifestyles, to learn the skills necessary for changing negative behaviors, and to set goals for improving their well-being.

**FOOD AND NUTRITION** **1**

**CREDIT** *Prerequisite: Successful completion of Health.*

Students will learn the relationship of food to good health and changing lifestyles. The importance of food safety and sanitation in the kitchen, basic measuring skills, reading and understanding a recipe, and "how-to" techniques are practiced as the students prepare a variety of foods using the major food groups in relationship to the Dietary Guidelines for Americans.

## PHYSICAL EDUCATION COURSE DESCRIPTIONS

### PHYSICAL EDUCATION

1

**CREDIT** In this course, students will be challenged physically, cognitively, and socially. Students will learn the basic principles of fitness and engage in fitness activities. Students will also engage in a variety of team sports, such as: volleyball, basketball, team handball, floor hockey, etc. Lifetime activities such as: archery, table tennis, golf, and other indoor and outdoor recreational activities will also be included. The focus will be the skills, strategies, and concepts necessary to play or participate in these sports and activities. In addition, students will be challenged with team building and cooperative activities.

### PERSONAL FITNESS

.5

**CREDIT** Personal Fitness provides students with the opportunity to participate in a wide variety of fitness activities. These activities challenge the students physically and mentally. Students will learn and research training methods and techniques and will engage in a variety of fitness training. Activities may include, but are not limited to, weight training, conditioning, and written research assignments on topics both assigned and chosen. Students will create and engage in a personal fitness program based on individual needs and appropriate fitness practices.

## CAREER TECHNICAL CENTER COURSE DESCRIPTIONS

BHS students have the opportunity to attend the Huot Technical Center in Laconia, NH and the Winnisquam Ag Center in Tilton, NH in grades 11 and 12. Representatives from the Huot Technical Center and Winnisquam Ag. program present to sophomores in the spring outlining the many opportunities available. See your school counselor for an application and more information.

## HUOT TECHNICAL CENTER COURSE DESCRIPTIONS

[Huot Career and Technical Center Program of Studies ...](#)

## WINNISQUAM AGRICULTURE CENTER COURSE DESCRIPTIONS

### **AGRICULTURAL SCIENCE & TECHNOLOGY**

**2.5 CREDITS**

*An application is required for this course. The due date is April 1st.*

In this course is designed to give students a basic understanding of the principles of agriculture and related technologies. This project-based course may include the basics of forestry and natural resources, small animal management and animal health, plant science and the use of machines, agricultural mechanics and shop safety. Technologies current to the industry of agriculture such as the use of GIS and GPS, lasers, robotics and sustainable energy systems will be discussed and applied when possible. Students will learn how scientists are working to meet the demand for food through use of technologies such as vertical farming, genetically modified foods and photovoltaic techniques. Emphasis will be placed on integrating skills developed into real life situations. Leadership development and community service are strong components of the class with students expected to participate in various agricultural jobs, judging contests and FFA leadership activities. Record keeping and documentation of skills are used to reinforce class activities. Class meets every day for a full year.

### **ANIMAL AND PLANT SCIENCE**

**2.5 CREDITS**

*An application is required for this course. The due date is April 1st. Prerequisite: Successful completion of Agricultural Science & Technology.*

Animal and Plant Science provides the option for skill development in both the animal and plant kingdoms. Students will learn the basics in each area including functional anatomy, nutritional concepts and health and disease considerations. These concepts will be applied by producing and harvesting a horticultural crop and/or developing a management plan for an animal species common to our region. All concepts will be addressed in a business context in order to promote personal growth and enhance career success. Class meets every day for a full year. WRHS has articulation agreements with SUNY Cobleskill and the Thompson School of Applied Science which may qualify students for two semester hours of credit upon successful completion of this course.

**NATURAL RESOURCES****2.5 CREDITS**

*An application is required for this course. The due date is April 1st. Prerequisite: Successful completion of Agricultural Science & Technology.*

This course is an introduction to the area of Natural Resources Management. In addition to awareness of employment opportunities, this course will encourage consumer understanding of and responsibility for our natural resources. The course will focus on the areas of forest, wildlife and fisheries management and components. Students will learn about sustainable harvesting, forest diseases, tree identification and equipment use. Native and invasive species will be covered as well as classification procedures, population studies, water quality and sampling techniques. These concepts will be applied through land management and other practical projects. Class meets every day for a full year. Students successfully completing Agricultural Science & Technology, Animal & Plant Science and Natural Resources may qualify for three semester hours of credit at the Thompson School of Applied Science.